

IN THE CLAIMS

Please amend the claims in the present application as follows:

Claims 1-8 cancelled.

9. (Original) A method for controlling fluid flow to and from a phacoemulsification handpiece, the handpiece including an ultrasonically driven, hollow needle, said method comprising the steps of:

inserting the needle into an eye for phacoemulsification of eye tissue;

introducing irrigation fluid into the eye;

aspirating fluid from the eye through the hollow needle;

determining initial irrigation fluid pressure;

adjusting irrigation fluid flow and aspiration fluid flow based on the determined initial irrigation fluid pressure;

continuously determining irrigation fluid pressure after the initial determination; and

continuously adjusting irrigation fluid flow and aspiration fluid flow based on the continuous determination of irrigation fluid pressure in order to accommodate changes in needle incision size and wound stretching during eye surgery.

10. (Original) The method according to claim 9 further comprising the step of using a positive displacement pump to introduce the irrigation fluid and the step of adjusting irrigation fluid flow includes adjusting pump speed.

11. (Original) The method according to claim 10 wherein the steps of initially determining irrigation fluid pressure and

continuously measuring irrigation fluid pressure including determining in-line irrigation pressure.

12. (Original) The method according to claim 9 wherein the step of adjusting aspiration fluid flow includes setting a maximum aspiration vacuum pressure as a function of determined irrigation fluid pressure.

13. (Original) The method according to claim 12 wherein the function is linear.

14. (Original) The method according to claim 9 further comprising the step of using a change in irrigation fluid pressure to provide an indication of wound leaking.

15. Cancelled

16. Cancelled

17. Cancelled

18. Cancelled

19. (Original) The method according to claim 12 wherein the function is linear.

20. (Original) The method according to claim 9 further comprising the step of using a change in irrigation fluid pressure to provide an indication of wound leaking.

Claims 21-22 cancelled.